



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,111	07/27/2001	Daniel Albert Voce	40-E-01	9782

28581 7590 03/07/2006

DUANE MORRIS LLP
PO BOX 5203
PRINCETON, NJ 08543-5203

EXAMINER

BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
----------	--------------

2668

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/917,111

Applicant(s)

VOCE ET AL.

Examiner

Steven Blount

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

A. Claims 2 – 5 are rejected under 35 U.S.C. 112 second paragraph for failing to particularly point out and distinctly claim the subject matter which the applicant regards as their invention.

In lines 25+ of claim 2, the phrase “while tending to avoid” is indefinite.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (hereinafter AAPA) in view of U.S. patent application number 20020003776 to Gokhale et al.

AAPA teaches, with respect to paragraph 2 of claim 6, transmitting ABR ATM data and its associated resources management cells over a satellite (spacecraft). See page 1, lines 18 – 20, and page 2, lines 18 – 20 of Applicants written portion of the specification: “Resource management cells are interspersed with the data cells of the ATM source signal.” AAPA also teaches, with respect to the last paragraph of this claim, that it is known in the art to mark the resource management cells with information regarding the presence of congestion before distributing them. See page 2, lines 28+. Note further that AAPA teaches the use of back Resource management cells which are used to control congestion through the use of a feedback control loop. See page 3, lines

Art Unit: 2661

18 to 22. While AAPA does discuss the problem associated with simplistic switching capabilities aboard satellites resulting in their incapability of setting bandwidth control bits (page 4, lines 15 – 20), AAPA does not teach a solution to this problem to comprise determining spacecraft payload congestion data relating to services associated with and including, among others, ABR, and then transmitting this information to the source terminal, as required by lines 22 – 27 of this claim. AAPA does not, further teach a method of doing this without using routing switches onboard the satellite, and coupling the spacecraft congestion signals by way of a downlink to the source terminal. AAPA does not additionally teach deleting the Resource Management cells from the stream of ABR data.

Gokhale et al teaches determining spacecraft payload congestion data relating to services associated with and including, among others, ABR, and then transmitting this information to the source terminal without using routing switches onboard the satellite, and coupling the spacecraft congestion signals by way of a downlink to the source terminal. See paragraphs 25 and 26.

While neither Gokahale et al nor AAPA teach deleting the Resource Management cells, the examiner notes that it would have been obvious to one of ordinary skill in the art to have done so in view of the fact that since Gokahale et al uses an offboard system for communicating congestion information to the sending terminal (ie, via the intermediary satellite 4 in figure 4 of Gokahale et al), there would be no reason for communicating the Resource Management cells taught in AAPA.

Art Unit: 2661

It would have been obvious to one of ordinary skill in the art at the time of the invention to have transmitted congestion information relating to the spacecraft and transmitted it to the source terminal of AAPA in light of the teachings of Gokahale et al in order to provide a means for reducing congestion along the satellite link portion of the system.

With regard to claim 6, see the rejection of claim 1 above and note that the "means other than by use of said routing switches" is discussed in paragraph 25, wherein the "traffic scheduler 22 periodically checks the size of the downlink queues" (par 25, lines 8+).

4. Claims 2 – 5 are allowed.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 – 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

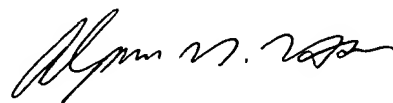
Art Unit: 2661

6. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB

SB
3/4/06



ALPUS H. HSU
PRIMARY EXAMINER